



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/965,341

09/27/2001

Samir S. Soliman

010427

3719

23696 7590 07/08/2009
QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

PAN, YUWEN

ART UNIT

PAPER NUMBER

2618

NOTIFICATION DATE

DELIVERY MODE

07/08/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com
kascanla@qualcomm.com
nanm@qualcomm.com

Office Action Summary	Application No. 09/965,341	Applicant(s) SOLIMAN, SAMIR S.	
	Examiner YUWEN PAN	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 21-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 21-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2618

Response to Arguments

1. Applicant's arguments, see applicant's remarks, filed on 4/16/09, with respect to the rejection(s) of claim(s) 1, and 22 under 35 U.S.C. 103 (a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ellis (U.S. Patent No. 3,718,767, hereinafter Ellis).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 21, 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellis.

Per claim 1, Ellis discloses a communication receiver, comprising: a low pass filter (see figure 1 and item 15) that filters a based band signal to produce on-channel received samples (speech channel or channels outputs) by removing out-of-channel signals from the based band signal (see column 4 and lines 55-66); and a processor (see item 21) that processes said base band signal to produce out-of-channel received samples of one or more received signals, said received signals being outside a frequency bandwidth associated with said base band signal (see column 5 and lines 1-15, column 6 and lines 1-44).

Same arguments apply, *mutatis mutandis*, to claim 21.

Art Unit: 2618

Per claim 2, Ellis further teaches a receiver backend portion that processes said on channel and out-of-channel essentially at the same time to decode said on-channel received samples (see figure 1, essentially parallel processing), and determining at least a link quality of said out-of-channel received samples (see column 6 and lines 5-65).

Same arguments apply, *mutatis mutandis*, to claim 25.

Per claim 3, Ellis further teaches a frequency source (item 6) that generates a first signal at essentially the same frequency as an on-channel frequency (see column 5 and lines 60-64); and a multiplier that mixes an amplified, received signal and the first signal to produce the base band signal (see item 14).

Same arguments apply, *mutatis mutandis*, to claim 26.

Per claim 23, Ellis discloses a communication receiver, comprising: teaches a frequency source (item 6) that generates a first signal at essentially the same frequency as an on-channel frequency (see column 5 and lines 60-64); and a multiplier that mixes an amplified, received signal and the first signal to produce the base band signal (see item 14), a low pass filter (see figure 1 and item 15) that filters a based band signal to produce on-channel received samples (speech channel or channels outputs) by removing out-of-channel signals from the based band signal (see column 4 and lines 55-66); and a processor (see item 21) that processes said base band signal to produce out-of-channel received samples of one or more received signals that can be used to search for pilots of candidate frequencies (see column 5 and lines 1-25, column 6 and lines 1-44).

Art Unit: 2618

Same arguments apply, *mutatis mutandis*, to claim 24.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4, 22, 27, 29, 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis in view of Kenney et al (US006009129A, hereinafter Kenney).

Per claim 4, Ellis does not express teach that a low noise amplifier is utilized in the communication receiver. Kenney further teaches that a low noise amplifier (see figure 3 and item 305) received signal comprising an on-channel and out-of-channel signals. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Kenney with Ellis to improve the signal strength with receiving signals.

Same arguments apply, *mutatis mutandis*, to claim 27.

Per claim 22, Ellis discloses a communication receiver, comprising: teaches a frequency source (item 6) that generates a first signal at essentially the same frequency as an on-channel frequency (see column 5 and lines 60-64); and a multiplier that mixes an amplified, received signal and the first signal to produce the base band signal (see item 14), a low pass filter (see figure 1 and item 15) that filters a based band signal to produce on-channel received samples (speech channel or channels outputs) by removing out-of-channel signals from the based band signal (see column 4 and lines 55-66); and a processor (see item 21) that processes said base

Art Unit: 2618

band signal to produce out-of-channel received samples of one or more received signals that can be used to search for pilots of candidate frequencies (see column 5 and lines 1-25, column 6 and lines 1-44) and said received signals being outside a frequency bandwidth associated with said base band signal (see column 5 and lines 1-15, column 6 and lines 1-44). Ellis does not express teach that a low noise amplifier is utilized in the communication receiver. Kenney teaches that a low noise amplifier (see figure 3 and item 305) received signal comprising an on-channel and out-of-channel signals. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Kenney with Ellis to improve the signal strength with receiving signals.

Same arguments apply, *mutatis mutandis*, to claims 29 and 32.

Per claim 31, Ellis further teaches a receiver backend portion that processes said on channel and out-of-channel essentially at the same time to decode said on-channel received samples (see figure 1, essentially parallel processing), and determining at least a link quality of said out-of-channel received samples (see column 6 and lines 5-65)

Per claim 30, Ellis further teaches that filtering and processing takes place at essentially at the same time (see figure 1, essentially parallel processing).

6. Claim 5 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis in view of Soliman (US005799005A).

Per claim 5, Ellis does not teach that a number of fingers and a searcher for processing said on-channel and out-of-channel received samples. Soliman teaches such limitation (see figure

Art Unit: 2618

4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such limitation of a CDMA system to capture signals for communication.

Same arguments apply, *mutatis mutandis*, to claim 28.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUWEN PAN whose telephone number is (571)272-7855. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yuwen Pan/
Primary Examiner, Art Unit 2618